

ABSTRACT OF THE INVENTION

A URL processing system and associated communication protocol enables network compatible applications to be securely integrated into any process involving concurrent operation of applications. A system employed by an application for encoding URL link data for use in detecting unauthorized URL modification includes a link processor for processing URL data. The link processor adaptively identifies and encrypts an address portion of a URL and incorporates the encrypted address portion of the URL together with the non-encrypted portion of the URL into a single processed URL data string. The system also includes a communication processor for incorporating the processed URL data string into formatted data for communication to a request device. The link processor compresses the identified URL address portion (e.g., with a hash function) prior to encryption. A system for decoding encoded URLs applies a hash function to a corresponding URL derived from a source different to the source of the received URL to provide a second hash value for comparison with a first received hash value for URL validation.